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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,245

Applicant(s)

MCLOONE, HUGH E.

Examiner

Daniel J. Colilla

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-26 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kozak et al. (WO 99/21077).

With respect to claim 12, Kozak et al. discloses a computer keyboard including a transceiver (transmitter and receiver, page 12, lines 18-20) and a group of alphanumeric keys as shown in Figure 4a of Kozak et al. Kozak et al. also discloses a transceiver in a remote control 52 allowing bi-directional communication between the keyboard and the remote control 52. A control circuitry is inherent in a computer keyboard because it is through the circuitry that the keyboard converts a typed key into a signal that the computer can interpret. The control circuitry in the keyboard must also inherently be in communication with the transmitter and receiver so that these signals can be received and used by the computer. Figure 4a of Kozak et al. shows a keyboard housing and Figure 4b of Kozak et al. shows a receiving portion 58. Note that since applicant is not reciting the remote control as a part of the invention in this claim the processor and plurality of keys of the remote control are not required to be met by the prior art.

With respect to claims 16-17, Kozak et al. discloses an electrical connector at the bottom of the remote control body 22 which connects to an electrical connector at the bottom of slot 20 (not shown).

Art Unit: 2854

With respect to claim 18, Figures 4a and 4b show the remote control body 22 being supported on the right side of the keyboard housing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (JP 10-207605) in view of Nguyen et al. (US 2004/0155791).

With respect to claim 1, Kato discloses the claimed wireless computer keyboard except for the first cluster of transport control keys, the second cluster of source control keys and the graphical user interface keys. Kato discloses wireless computer keyboard including a keyboard housing 20, a keyboard processor (inherent in the keyboard in order to receive input from an operator and send out a signal), an alphanumeric section (keys 21) and a remote control portion 30 disposed laterally to the alphanumeric section; the remote control section having a set of keys 32 as shown in Figures 1-2 of Kato. Nguyen et al. teaches a remote control for use with a computer that includes a first cluster of transport control keys 15-19, a second cluster of source control keys 10-14 and a graphical user interface key 23 shown in Figures 4-5 of Nguyen et al. It would have been obvious to combine the teaching of Nguyen et al. with the keyboard disclosed by Kato for the advantage of providing more functionality to the keyboard for operating computer systems.

Art Unit: 2854

With respect to claim 4, while not explicitly mentioned, the remote control disclosed by Kato must include a control processor in order to process the input from keys 32 and send the data as a signal from transmitting part 31.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (JP 10-207605) in view of Nguyen et al. (US 2004/0155791), as applied to claim 1 above, and further in view of Yamamoto (JP 2001-318753).

Kato in view of Nguyen et al. discloses the claimed wireless computer keyboard except for the media control interface. However, Yamamoto teaches a keyboard with a remote control that is removably coupleable with the keyboard by a media control interface 11,24. Connector 11 of the media control interface includes a pin terminal 13 which receives a signal from the remote control unit 20 which sends a signal to the main body 1 (keyboard) (see paragraph [0008] if the machine translation of Yamamoto). It would have been obvious to combine the teaching of Yamamoto with the wireless keyboard disclosed by Kato in view of Nguyen et al. for the advantage of the rechargeable battery 36 in remote control 20 which gets recharged while it is connected with the keyboard (see paragraph [0011] of the machine translation of Yamamoto).

6. Claims 1-2, 5, 7-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka (US 5,049,863) in view of Watanabe (US 6,593,859) and Nguyen et al. (US 2004/0155791).

With respect to claim 1, Oka discloses the claimed keyboard except that it is not wireless and except for the first cluster of transport control keys and the second cluster of source control

Art Unit: 2854

keys. Oka discloses a keyboard 11 with a keyboard housing as shown in Figures 1-2, a keyboard processor as shown in Figure 6, a group of alphanumeric keys 11a and 11b, and a remote control portion 16 with a set of graphical interface keys 17 disposed laterally of the alphanumeric section 11a, 11b. The keys 17 are in electrical communication with the keyboard 11 through connectors 13 and 19 as shown in Figures 2 and 3 of Oka. Watanabe teaches a keyboard 300 that is in wireless communication with a computer 100,200 through transmitter 301 and receiver 102 as shown in Figure 1 of Watanabe. It would have been obvious to combine the teaching of Watanabe with the keyboard disclosed by Oka for the advantage of a keyboard that can be moved freely without the restrictions of a wire. Nguyen et al. teaches a remote control for use with a computer that includes a first cluster of transport control keys 15-19 and a second cluster of source control keys 10-14 as shown in Figures 4-5 of Nguyen et al. It would have been obvious to combine the teaching of Nguyen et al. with the keyboard disclosed by Oka for the advantage of providing more functionality to the keyboard for operating computer systems.

With respect to claim 2, the remote control portion 16 is removably coupleable to the keyboard housing as shown in Figure 2 of Oka. When the remote control portion 16 is coupled to the keyboard it sends signals from the keys 17 to the keyboard.

With respect to claim 5, the remote control processor disclosed by Oka has a control processor that transfers keyed input into the keyboard 11 as shown in Figure 7 of Oka.

With respect to claim 7, Oka discloses a receiving slot 15 for attaching the remote control portion 16.

With respect to claim 8, Oka discloses mating case members as shown in Figure 4 through which the remote control portion 16 is attached to the keyboard 11.

With respect to claims 10-11, Oka discloses a processor for the remote control portion 16 as shown in Figure 7 of Oka, and Oka discloses transferring the input information from the remote control portion 16 to the keyboard processor as described in col. 3, lines 24-34 of Oka.

7. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al. (WO 99/21077).

With respect to claim 13, the embodiment shown in Figures 4a and 4b of Kozak et al. discloses the claimed computer keyboard except for the recess for substantially enclosing the remote control body. However, the embodiment shown in Figure 2 of Kozak et al. has a recess 20 for substantially enclosing the remote control body 22. It would have been obvious to combine the teaching of the embodiment of Figure 2 of Kozak et al. with the keyboard disclosed by Figures 4a and 4b of Kozak et al. for the advantage of a more durable connection between the keyboard and remote control. The embodiment of Figure 1 is mostly enclosed by the keyboard allowing a stronger connection less likely to break as compared with the connection shown in Figures 4a and 4b.

With respect to claim 14, the recess 20 could also be considered a slot since the remote control 22 longitudinally slides into the recess 20.

8. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al. (WO 99/21077) in view of Kato (JP 10-207605).

Kozak et al. discloses the claimed keyboard except for the receiving portion comprising a groove. however Figure 2 of Kato shows a receiving portion on a keyboard that is a groove for

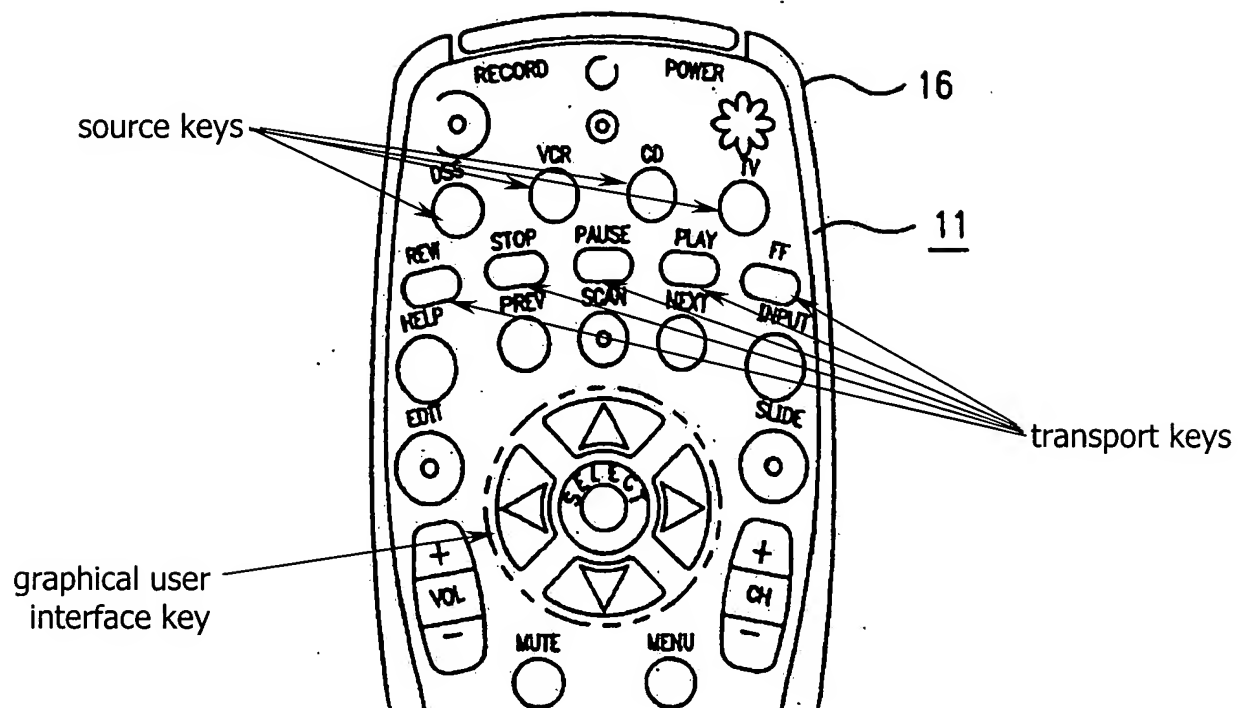
Art Unit: 2854

receiving a remote control. It would have been obvious to combine the teaching of Kato with the keyboard disclosed by Kozak et al. for the advantage of a stronger connection between the remote control and the keyboard. Kato teaches a surface for supporting the remote control from underneath the remote control which reduces the chance of the remote control breaking off of the keyboard.

9. Claims 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi (US 2002/0173339) in view of Hayes et al. (US 2004/0056984).

With respect to claim 19, Safadi discloses the claimed wireless remote control except for the first cluster of transport keys, the second cluster of source keys and the graphical user interface key. Safadi discloses a wireless remote control 50 which includes a processor 55 which inherently requires circuitry to allow electronic signals to be processed, a keyboard (plurality of keys) (see paragraph [0018] of Safadi) and a body with a protrusion portion 65,68 as shown in Figure 1 of Safadi. Paragraph [0018] discloses that the remote control 50 may be a universal remote control. Additionally, Safadi discloses that the remote control 50 can be coupled to a host device 10 as shown in Figure 1 of Safadi. Hayes et al. teaches a universal remote control with key as shown below in the Figure taken from Figure 1 of Hayes et al.:

Art Unit: 2854



It would have been obvious to combine the teaching of Hayes et al. with the wireless remote control disclosed by Safadi for the advantage of controlling a variety of systems from one remote control device.

With respect to claim 20, the remote control includes a control portion 55 which is connected to the host 10 via the connection 65. The remote control portion also includes a user interface 60 which may be a keypad (Safadi, paragraph [0020], lines 1-6). And in paragraph [0013], lines 1-6, Safadi discloses that the remote control 50 and the host 10 can be connected by conventional communications ports.

Claims 21-22 fail to further limit the remote control and therefore are rejected along with claim 19.

10. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al. (WO 99/21077) in view of Nguyen et al. (US 2004/0155791).

Art Unit: 2854

With respect to claim 23, Kozak et al. discloses the claimed wireless keyboard system except for the first cluster of transport keys, the second cluster of source keys and the graphical user interface key. Kozak et al. discloses a wireless keyboard system including a keyboard housing, as shown in Figure 4a of Kozak et al., a keyboard processor which is inherent in a computer keyboard in order to send the inputted signals to the computer, a group of alphanumeric keys, a remote control body 52. On page 12, lines 18-20, Kozak et al. discloses that the remote control 52 is operable in stand alone mode which would require a processor to provide processing of the inputted data. In the same section Kozak et al. discloses that the remote control 52 can plug into a keyboard 54 via connectors 56 and 58 (Kozak et al., pg. 11, lines 21-25). On pg. 12, lines 1-4 Kozak et al. further discloses that the keyboard and remote control 52 communicate with one another when connected. On page 15, lines 6-10, Kozak et al. discloses that the remote control 62 can be used with a transceiver 72 which communicates to a computer through a keyboard. The remote control 62 is capable of being abutted against the keyboard while using the wireless connection.

Nguyen et al. teaches a remote control for use with a computer that includes a first cluster of transport control keys 15-19, a second cluster of source control keys 10-14 and a graphical user interface key 23 shown in Figures 4-5 of Nguyen et al. It would have been obvious to combine the teaching of Nguyen et al. with the keyboard system disclosed by Kozak et al. for the advantage of providing more functionality to the keyboard for operating computer systems.

With respect to claim 24, Kozak et al. shows a recess in keyboard 54 which accepts connector 56.

Art Unit: 2854

11. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al. (WO 99/21077) in view of Nguyen et al. (US 2004/0155791) as applied to claims 23-24 above, and further in view of Lee (US 5,574,481).

With respect to claim 25, Kozak et al. in view of Nguyen et al. discloses the claimed keyboard except for the keyboard being foldable. However, Lee teaches a keyboard that is foldable as shown in Figures 1, 7 and 9 of Lee. The keyboard includes mating housing members 13 and 14. It would have been obvious to combine the teaching of Lee with the keyboard disclosed by Kozak et al. in view of Nguyen et al. for the advantage of allowing the operator to adjust the position of the keyboard to a comfortable typing position (Oka, col. 1, lines 17-20).

With respect to claim 26, Oka and Watanabe discloses the claimed keyboard except for the keyboard being foldable. However, Lee teaches a keyboard that is foldable as shown in Figures 1, 7 and 9 of Lee. The keyboard includes mating housing members 13 and 14 and a hinge shown at the bottom portion of member 26 in Figure 7 of Lee. It would have been obvious to combine the teaching of Lee with the keyboard disclosed by Kozak et al. in view of Nguyen et al. for the advantage of allowing the operator to adjust the position of the keyboard to a comfortable typing position (Lee, col. 1, lines 17-20).

Allowable Subject Matter

12. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Mon.-Thur. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 25, 2004



Daniel J. Colilla
Primary Examiner
Art Unit 2854